



Rebecca J. Dulin
Senior Counsel

Duke Energy
1201 Main Street
Capital Center Building
Suite 1180
Columbia, SC 29201

o: 803.988.7130
f: 803.988.7123

Rebecca.Dulin@duke-energy.com

August 30, 2017

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Fuel Report**
Docket No. 2006-176-E

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is Duke Energy Progress, LLC's Monthly Fuel Report in Docket No. 2006-176-E for the month of July 2017.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803-988-7130.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rebecca Dulin", written in a cursive style.

Rebecca J. Dulin

Enclosure

cc: Service List

**Duke Energy Progress
Summary of Monthly Fuel Report**

Schedule 1

Line No.	Item	July 2017
1	Fuel and Fuel-related Costs excluding DERP incremental costs	\$ 162,962,506
	MWH sales:	
2	Total System Sales	6,564,451
3	Less intersystem sales	387,768
4	Total sales less intersystem sales	6,176,683
5	Total fuel and fuel-related costs (¢/KWH) (Line 1/Line 4)	2.6383
6	Current fuel & fuel-related cost component (¢/KWH) (per Schedule 4)	2.5036
	Generation Mix (MWH):	
	Fossil (By Primary Fuel Type):	
7	Coal	1,478,041
8	Oil	4,407
9	Natural Gas - Combustion Turbine	229,418
10	Natural Gas - Combined Cycle	1,829,427
11	Total Fossil	3,541,293
12	Nuclear	2,638,084
13	Hydro - Conventional	28,398
14	Solar Distributed Generation	26,925
15	Total MWH generation	6,234,700

Note: Detail amounts may not add to totals shown due to rounding.

Schedule 2

**Duke Energy Progress
Details of Fuel and Fuel-Related Costs**

<u>Description</u>	<u>July 2017</u>
Fuel and Fuel-Related Costs:	
Steam Generation - Account 501	
0501110 coal consumed - steam	\$ 49,914,054
0501310 fuel oil consumed - steam	578,767
Total Steam Generation - Account 501	<u>50,492,821</u>
Nuclear Generation - Account 518	
0518100 burnup of owned fuel	18,347,834
0518600 - Disposal Cost	-
Total Nuclear Generation - Account 518	<u>18,347,834</u>
Other Generation - Account 547	
0547000 natural gas consumed - Combustion Turbine	7,227,894
0547000 natural gas consumed - Combined Cycle	53,721,366
0547200 fuel oil consumed	106,840
Total Other Generation - Account 547	<u>61,056,100</u>
Purchased Power and Net Interchange - Account 555	
Fuel and fuel-related component of purchased power	33,054,302
Fuel and fuel-related component of DERP purchases	-
PURPA purchased power capacity	7,651,932
DERP purchased power capacity	-
Total Purchased Power and Net Interchange - Account 555	<u>40,706,234</u>
Less fuel and fuel-related costs recovered through intersystem sales - Account 447	9,742,373
Total Costs Included in Base Fuel Component	\$ 160,860,616
Environmental Costs	
0509030, 0509212, 0557451 emission allowance expense	\$ 2,214
0502020, 0502030, 0502040, 0502080, 0502090, 0548020 reagents expense	2,123,578
Emission Allowance Gains	-
Less reagents expense recovered through intersystem sales - Account 447	13,094
Less emissions expense recovered through intersystem sales - Account 447	<u>10,808</u>
Total Costs Included in Environmental Component	2,101,890
Fuel and Fuel-related Costs excluding DERP incremental costs	<u>\$ 162,962,506</u>
DERP Incremental Costs	120,922
Total Fuel and Fuel-related Costs	<u>\$ 163,083,428</u>

Notes: Detail amounts may not add to totals shown due to rounding.

**DUKE ENERGY PROGRESS
PURCHASED POWER AND INTERCHANGE
SOUTH CAROLINA**

JULY 2017

**Schedule 3, Purchases
Page 1 of 2**

Purchased Power	Total	Capacity	Non-capacity		
Marketers, Utilities, Other	\$	\$	mWh	Fuel \$	Non-fuel \$
Broad River Energy, LLC.	\$ 13,401,744	\$ 10,760,476	47,796	\$ 2,641,268	-
City of Fayetteville	3,074,890	3,022,250	-	52,640	-
Haywood EMC	29,850	29,850	-	-	-
NCEMC	6,908,005	5,427,546	37,186	1,480,459	-
PJM Interconnection, LLC.	29,029	-	1,155	29,029	-
Smurfit Stone Container Corp	46,447	-	1,399	46,447	-
Southern Company Services	5,020,025	1,654,380	105,467	3,365,645	-
DE Carolinas - Native Load Transfer	2,609,277	-	85,390	2,501,235	\$ 108,042
DE Carolinas - Native Load Transfer Benefit	54,120	-	-	54,120	-
Energy Imbalance	9	-	1	6	3
Generation Imbalance	2,799	-	114	1,707	1,092
	\$ 31,176,195	\$ 20,894,502	278,508	\$ 10,172,556	\$ 109,137
Act 236 PURPA Purchases					
Renewable Energy	\$ 21,990,012	-	303,728	\$ 21,990,012	-
Other Qualifying Facilities	8,543,666	-	113,988	8,543,666	-
	\$ 30,533,678	\$ -	417,716	\$ 30,533,678	\$ -
Total Purchased Power	\$ 61,709,873	\$ 20,894,502	696,224	\$ 40,706,234	\$ 109,137

NOTE: Detail amounts may not add to totals shown due to rounding.

**DUKE ENERGY PROGRESS
INTERSYSTEM SALES*
SOUTH CAROLINA**

JULY 2017

**Schedule 3, Sales
Page 2 of 2**

	Total	Capacity	Non-capacity		
Sales	\$	\$	mWh	Fuel \$	Non-fuel \$
Utilities:					
SC Electric & Gas - Emergency	\$ (40,219)	-	-	\$ (84)	\$ (40,135)
Market Based:					
NCEMC Purchase Power Agreement	1,204,846	652,500	14,533	449,148	103,198
PJM Interconnection, LLC.	708,471	-	12,061	470,397	238,074
Other:					
DE Carolinas - Native Load Transfer Benefit	384,162	-	-	384,162	-
DE Carolinas - Native Load Transfer	8,937,985	-	361,163	8,462,652	475,333
Generation Imbalance	-	-	11	-	-
Total Intersystem Sales	\$ 11,195,245	\$ 652,500	387,768	\$ 9,766,275	\$ 776,470

* Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

Duke Energy Progress
(Over) / Under Recovery of Fuel Costs
July 2017

Schedule 4
Page 1 of 3

			Total Residential	General Service Non-Demand	Demand	Lighting	Total
Line No.							
1	Actual System kWh sales	Input					6,176,683,274
2	DERP Net Metered kWh generation	Input					271,494
3	Adjusted System kWh sales	L1 + L2					6,176,954,768
4	Actual S.C. Retail kWh sales	Input	206,317,399	30,675,784	396,180,803	6,906,875	640,080,861
5	DERP Net Metered kWh generation	Input	133,103	6,252	132,139		271,494
6	Adjusted S.C. Retail kWh sales	L4 + L5	206,450,502	30,682,036	396,312,942	6,906,875	640,352,355
7	Actual S.C. Demand units (kw)	L32 / 31b *100			692,814		
Base fuel component of recovery - non-capacity							
8	Incurred System base fuel - non-capacity expense	Input					\$141,678,616
9	Eliminate avoided fuel benefit of S.C. net metering	Input					\$8,695
10	Adjusted Incurred System base fuel - non-capacity expense	L8 + L9					\$141,687,311
11	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)	L10 / L3 * 100					2.294
12	S.C. Retail portion of adjusted incurred system expense	L6 * L11 / 100	\$4,735,572	\$703,786	\$9,090,647	\$158,430	\$14,688,435
13	Assign 100 % of Avoided Fuel Benefit of S.C net metering	Input	(\$4,660)	(\$470)	(\$3,565)	\$0	(\$8,695)
14	S.C. Retail portion of incurred system expense	L12 + L13	\$4,730,912	\$703,316	\$9,087,082	\$158,430	\$14,679,740
15	Billed base fuel - non-capacity rate (¢/kWh) - Note 1	Input	2.210	2.210	2.210	2.210	2.210
16	Billed base fuel - non-capacity revenue	L4 * L15 /100	\$4,559,784	\$677,935	\$8,755,596	\$152,642	\$14,145,957
17	DERP NEM incentive - fuel component	Input	(\$1,241)	(\$125)	(\$950)	\$0	(\$2,316)
18	Adjusted S.C. billed base fuel - non-capacity revenue	L16 + L17	\$4,558,543	\$677,810	\$8,754,646	\$152,642	\$14,143,641
19	S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L18 - L14	\$172,369	\$25,506	\$332,436	\$5,788	\$536,099
20	Adjustment - Economic Purchases	Input	\$0	\$0	\$0	\$0	\$0
21	Total S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L19 + L20	\$172,369	\$25,506	\$332,436	\$5,788	\$536,099
Base fuel component of recovery - capacity							
22a	Incurred base fuel - capacity rates by class (¢/kWh)	L23 / L4 * 100	0.516	0.350			
22b	Incurred base fuel - capacity rate (¢/kW)	L23 / L7 * 100			118		
23	Incurred S.C. base fuel - capacity expense	Input	\$1,065,295	\$107,475	815,033.00		\$1,987,803
24a	Billed base fuel - capacity rates by class (¢/kWh)	Input	0.471	0.371			
24b	Billed base fuel - capacity rate (¢/kW)	Input			96		
25	Billed S.C. base fuel - capacity revenue	L24a * L4 /100	\$972,563	\$113,807	\$664,933	\$0	\$1,751,303
26	S.C. base fuel - capacity (over)/under recovery [See footnote]	L25 - L23	\$92,732	(\$6,332)	150,100.00	\$0	\$236,500
27	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
28	Total S.C. base fuel - capacity (over)/under recovery [See footnote]	L26 + L27	\$92,732	(\$6,332)	\$150,100	\$0	\$236,500
Environmental component of recovery							
29a	Incurred environmental rates by class (¢/kWh)	L30 / L4 * 100	0.057	0.038			
29b	Incurred environmental rate (¢/kW)	L30 / L7 * 100			13		
30	Incurred S.C. environmental expense	Input	\$116,731	\$11,777	\$89,308		\$217,816
31a	Billed environmental rates by class (¢/kWh)	Input	0.035	0.024			
31b	Billed environmental rate (¢/kW)	Input			7		
32	Billed S.C. environmental revenue	L31a * L4 /100	\$71,663	\$7,362	\$48,497		\$127,522
33	S.C. environmental (over)/under recovery [See footnote]	L32 - L30	\$45,068	\$4,415	\$40,811	\$0	\$90,294
34	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
35	Total S.C. environmental (over)/under recovery [See footnote]	L33 + L34	\$45,068	\$4,415	\$40,811	\$0	\$90,294
Distributed Energy Resource Program component of recovery: avoided costs							
36a	Incurred S.C. DERP avoided cost rates by class (¢/kWh)	L37 / L4 * 100	0.000	0.000			
36b	Incurred S.C. DERP avoided cost rates by class (¢/kW)	L37 / L7 * 100			0.000		
37	Incurred S.C. DERP avoided cost expense	Input	-	-	-		\$0
38a	Billed S.C. DERP avoided cost rates by class (¢/kWh)	Input	0.000	0.000			
38b	Billed S.C. DERP avoided cost rates by class (¢/kW)	Input			0.000		
39	Billed S.C. DERP avoided cost revenue	L38a * L4 /100	\$0	\$0	\$0		\$0
40	S.C. DERP avoided cost (over)/under recovery [See footnote]	L39 - L37	\$0	\$0	\$0	\$0	\$0
41	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
42	Total S.C. DERP avoided cost (over)/under recovery [See footnote]	L40 + L41	\$0	\$0	\$0	\$0	\$0
43	Total (over)/under recovery [See footnote]	L21 + L28 + L35 + L42	\$310,169	\$23,589	\$523,347	\$5,788	\$862,893

Duke Energy Progress
(Over) / Under Recovery of Fuel Costs
July 2017

Schedule 4
Page 2 of 3

Year 2017-2018

Cumulative (over) / under recovery - **BASE FUEL NON-CAPACITY**

Balance ending February 2017	6,872,181					
March 2017 - actual	9,008,686	\$763,399	\$98,306	\$1,239,859	\$34,941	\$2,136,505
April 2017 - actual	10,494,432	\$426,888	\$62,439	\$973,844	\$22,575	\$1,485,746
May 2017 - actual	9,808,868	(\$173,333)	(\$27,502)	(\$475,412)	(\$9,317)	(\$685,564)
June 2017 - actual	11,236,626	\$488,131	\$74,799	\$844,641	\$20,187	\$1,427,758
July 2017 - actual	11,772,725	\$172,369	\$25,506	\$332,436	\$5,788	\$536,099
August 2017 - forecast	11,526,541	(\$84,229)	(\$10,726)	(\$147,696)	(\$3,533)	(\$246,184)
September 2017 - forecast	10,052,710	(\$499,791)	(\$60,463)	(\$891,675)	(\$21,902)	(\$1,473,831)
October 2017 - forecast	8,195,666	(\$538,620)	(\$79,463)	(\$1,209,130)	(\$29,831)	(\$1,857,044)
November 2017 - forecast	6,715,366	(\$431,594)	(\$62,582)	(\$962,457)	(\$23,667)	(\$1,480,300)
December 2017 - forecast	6,545,980	(\$67,692)	(\$6,310)	(\$93,035)	(\$2,349)	(\$169,386)
January 2018 - forecast	6,383,356	(\$68,637)	(\$6,015)	(\$85,851)	(\$2,121)	(\$162,624)
February 2018 - forecast	5,197,708	(\$469,517)	(\$43,457)	(\$656,565)	(\$16,109)	(\$1,185,648)
March 2018 - forecast	4,916,880	(\$101,021)	(\$11,065)	(\$164,738)	(\$4,004)	(\$280,828)
April 2018 - forecast	3,692,939	(\$365,358)	(\$51,469)	(\$787,818)	(\$19,296)	(\$1,223,941)
May 2018 - forecast	2,633,629	(\$299,148)	(\$47,577)	(\$695,757)	(\$16,828)	(\$1,059,310)
June 2018 - forecast	2,270,008	(\$113,222)	(\$16,138)	(\$228,709)	(\$5,552)	(\$363,621)

Year 2017-2018

Cumulative (over) / under recovery - **BASE FUEL CAPACITY**

Balance ending February 2017	893,261					
March 2017 - actual	806,670	(\$56,692)	(\$2,999)	(\$26,900)	\$0	(\$86,591)
April 2017 - actual	855,256	\$34,522	\$2,742	\$11,322	\$0	\$48,586
May 2017 - actual	863,837	\$16,521	(\$860)	(\$7,080)	\$0	\$8,581
June 2017 - actual	1,093,070	\$111,106	\$8,714	\$109,413	\$0	\$229,233
July 2017 - actual	1,329,570	\$92,732	(\$6,332)	\$150,100	\$0	\$236,500
August 2017 - forecast	1,177,367	(\$173,895)	(\$16,074)	\$37,766	\$0	(\$152,203)
September 2017 - forecast	999,006	(\$52,155)	\$483	(\$126,689)	\$0	(\$178,361)
October 2017 - forecast	1,349,597	\$189,232	\$9,246	\$152,113	\$0	\$350,591
November 2017 - forecast	1,475,961	\$119,890	\$4,033	\$2,441	\$0	\$126,364
December 2017 - forecast	1,058,504	(\$257,053)	\$170	(\$160,574)	\$0	(\$417,457)
January 2018 - forecast	614,122	(\$456,151)	(\$7,429)	\$19,198	\$0	(\$444,382)
February 2018 - forecast	255,913	(\$329,708)	(\$2,380)	(\$26,121)	\$0	(\$358,209)
March 2018 - forecast	211,015	(\$34,488)	\$9,875	(\$20,285)	\$0	(\$44,898)
April 2018 - forecast	462,694	\$171,405	\$10,905	\$69,369	\$0	\$251,679
May 2018 - forecast	732,326	\$212,728	\$6,686	\$50,218	\$0	\$269,632
June 2018 - forecast	618,124	\$37,158	(\$4,668)	(\$146,692)	\$0	(\$114,202)

Year 2017-2018

Cumulative (over) / under recovery - ENVIRONMENTAL

2 Balance ending February 2017	(618,034)					
March 2017 - actual	(633,513)	(\$13,791)	(\$1,056)	(\$632)	\$0	(\$15,479)
April 2017 - actual	(682,896)	(\$27,527)	(\$3,223)	(\$18,633)	\$0	(\$49,383)
May 2017 - actual	(718,603)	(\$19,646)	(\$2,877)	(\$13,184)	\$0	(\$35,707)
June 2017 - actual	(729,460)	(\$12,726)	(\$2,238)	\$4,107	\$0	(\$10,857)
July 2017 - actual	(639,166)	\$45,068	\$4,415	\$40,811	\$0	\$90,294
August 2017 - forecast	(479,084)	\$78,358	\$8,940	\$72,784	\$0	\$160,082
September 2017 - forecast	(479,873)	\$2,074	\$1,393	(\$4,256)	\$0	(\$789)
October 2017 - forecast	(480,623)	(\$859)	(\$91)	\$200	\$0	(\$750)
November 2017 - forecast	(517,275)	(\$16,393)	(\$1,576)	(\$18,683)	\$0	(\$36,652)
December 2017 - forecast	(456,496)	\$29,591	\$5,498	\$25,690	\$0	\$60,779
January 2018 - forecast	(293,701)	\$70,783	\$10,688	\$81,324	\$0	\$162,795
February 2018 - forecast	(161,436)	\$64,264	\$8,569	\$59,432	\$0	\$132,265
March 2018 - forecast	(122,524)	\$51,803	(\$148)	(\$12,743)	\$0	\$38,912
April 2018 - forecast	(102,007)	\$41,584	(\$1,772)	(\$19,295)	\$0	\$20,517
May 2018 - forecast	(83,153)	\$37,681	(\$1,606)	(\$17,221)	\$0	\$18,854
June 2018 - forecast	2,255	\$47,988	\$5,962	\$31,458	\$0	\$85,408

Cumulative (over) / under recovery - DERP AVOIDED COSTS

Balance ending February 2017	-					
March 2017 - actual	0	\$0	\$0	\$0	\$0	\$0
April 2017 - actual	0	\$0	\$0	\$0	\$0	\$0
May 2017 - actual	0	\$0	\$0	\$0	\$0	\$0
June 2017 - actual	252	\$135	\$14	\$103	\$0	\$252
July 2017 - actual	252	\$0	\$0	\$0	\$0	\$0
August 2017 - forecast	252	\$0	\$0	\$0	\$0	\$0
September 2017 - forecast	252	\$0	\$0	\$0	\$0	\$0
October 2017 - forecast	252	\$0	\$0	\$0	\$0	\$0
November 2017 - forecast	252	\$0	\$0	\$0	\$0	\$0
December 2017 - forecast	252	\$0	\$0	\$0	\$0	\$0
January 2018 - forecast	252	\$0	\$0	\$0	\$0	\$0
February 2018 - forecast	252	\$0	\$0	\$0	\$0	\$0
March 2018 - forecast	252	\$0	\$0	\$0	\$0	\$0
April 2018 - forecast	252	\$0	\$0	\$0	\$0	\$0
May 2018 - forecast	252	\$0	\$0	\$0	\$0	\$0
June 2018 - forecast	252	\$0	\$0	\$0	\$0	\$0

Duke Energy Progress
(Over) / Under Recovery of Fuel Costs
July 2017

Line No.			Residential	Commercial	Industrial	Total
Distributed Energy Resource Program component of recovery: incremental costs						
44	Incurred S.C. DERP incremental expense	Input	\$64,804	\$33,259	\$22,859	\$120,922
45	Billed S.C. DERP incremental rates by account (\$/account)	Input	1.00	2.88	99.56	
46	Billed S.C. DERP incremental revenue	Input	\$137,343	\$93,038	\$26,211	\$256,592
47	S.C. DERP incremental (over)/under recovery [See footnote]	L44 - L46	(\$72,539)	(\$59,779)	(\$3,352)	(\$135,670)
48	Adjustment	Input	\$0	\$0	\$0	\$0
49	Total S.C. DERP incremental (over)/under recovery [See footnote]	L47 + L48	(\$72,539)	(\$59,779)	(\$3,352)	(\$135,670)

Year 2017-2018

Cumulative (over) / under recovery

	Cumulative	Residential	Commercial	Industrial	Total
_/2 Balance ending February 2017	391,293				
March 2017 - actual	371,761	(\$11,829)	(\$3,912)	(\$3,791)	(\$19,532)
April 2017 - actual	379,969	\$3,069	\$3,581	\$1,558	\$8,208
May 2017 - actual	399,488	\$8,882	\$6,936	\$3,701	\$19,519
June 2017 - actual	460,764	\$31,063	\$17,415	\$12,798	\$61,276
July 2017 - actual	325,094	(\$72,539)	(\$59,779)	(\$3,352)	(\$135,670)
August 2017 - forecast	305,369	(\$13,530)	(\$23,755)	\$17,560	(\$19,725)
September 2017 - forecast	303,480	(\$4,636)	(\$18,281)	\$21,028	(\$1,889)
October 2017 - forecast	321,192	\$5,777	(\$12,855)	\$24,790	\$17,712
November 2017 - forecast	393,057	\$34,931	\$2,010	\$34,924	\$71,865
December 2017 - forecast	481,298	\$43,796	\$6,368	\$38,077	\$88,241
January 2018 - forecast	501,715	\$8,143	(\$13,008)	\$25,282	\$20,417
February 2018 - forecast	521,451	\$7,658	(\$13,129)	\$25,207	\$19,736
March 2018 - forecast	540,896	\$7,259	(\$13,103)	\$25,289	\$19,445
April 2018 - forecast	560,127	\$7,105	(\$13,043)	\$25,169	\$19,231
May 2018 - forecast	578,735	\$6,826	(\$13,347)	\$25,129	\$18,608
June 2018 - forecast	597,058	\$6,634	(\$13,399)	\$25,088	\$18,323

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of over or under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts.

Under collections, or regulatory assets, are shown as positive amounts.

_/1 Total residential billed fuel rate is a composite rate reflecting the approved residential rate of 2.246 and RECD 5% discount.

_/2 February 2017 ending balance reflects total adjustments of \$(129,849) pursuant to the docket no. 2017-1-E directive.

Duke Energy Progress
Fuel and Fuel Related Cost Report
July 2017

Schedule 5
Page 1 of 2

Description	Weatherspoon CT	Lee CC	Sutton CC/CT	Robinson Nuclear	Asheville Steam	Asheville CT	Roxboro Steam	Mayo Steam
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	\$3,737,699	-	\$21,236,778	\$116,612
Oil	-	-	-	(4,164)	4,242	-	350,359	153,135
Gas - CC	-	18,108,552	13,532,822	-	-	-	-	-
Gas - CT	24	-	183,783	-	-	643,117	-	-
Total	\$24	\$18,108,552	\$13,716,605	(4,164)	\$3,741,941	\$643,117	\$21,587,137	\$269,747
Average Cost of Fuel Purchased (¢/MBTU)								
Coal	-	-	-	-	312.65	-	309.03	0.00
Oil	-	-	-	-	-	-	1,264.97	1,238.76
Gas - CC	-	395.41	458.18	-	-	-	-	-
Gas - CT	-	-	161.94	-	-	395.22	-	-
Weighted Average	-	395.41	447.22	-	313.01	395.22	312.86	2,182.07
Cost of Fuel Burned (\$)								
Coal	-	-	-	-	\$5,164,746	-	\$35,297,292	\$9,452,016
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	17,340	-	61,448	-	36,587	2,548	392,429	149,752
Gas - CC	-	18,108,552	13,532,822	-	-	-	-	-
Gas - CT	24	-	183,783	-	-	643,117	-	-
Nuclear	-	-	-	4,099,024	-	-	-	-
Total	\$17,364	\$18,108,552	13,778,053.00	4,099,024	\$5,201,333	\$645,665	\$35,689,721	\$9,601,768
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	306.80	-	317.62	313.22
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	1,507.83	-	2,037.40	-	1,344.62	1,348.15	1,273.91	1,283.88
Gas - CC	-	395.41	458.18	-	-	-	-	-
Gas - CT	-	-	161.94	-	-	395.22	-	-
Nuclear	-	-	-	69.31	-	-	-	-
Weighted Average	1,509.91	395.41	448.78	69.31	308.48	396.33	320.26	316.95
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	3.61	-	3.30	3.58
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	216.75	-	21.98	-	15.82	14.99	13.09	14.67
Gas - CC	-	2.88	3.26	-	-	-	-	-
Gas - CT	-	-	1.74	-	-	4.47	-	-
Nuclear	-	-	-	0.74	-	-	-	-
Weighted Average	-	2.88	3.23	0.74	3.63	4.48	3.32	3.62
Burned MBTU's								
Coal	-	-	-	-	1,683,404	-	11,113,156	3,017,721
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	1,150	-	3,016	-	2,721	189	30,805	11,664
Gas - CC	-	4,579,639	2,953,592	-	-	-	-	-
Gas - CT	-	-	113,490	-	-	162,724	-	-
Nuclear	-	-	-	5,913,629	-	-	-	-
Total	1,150	4,579,639	3,070,098	5,913,629	1,686,125	162,913	11,143,961	3,029,385
Net Generation (mWh)								
Coal	-	-	-	-	143,091	-	1,070,922	264,028
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	8	-	280	-	231	17	2,998	1,021
Gas - CC	-	629,278	415,597	-	-	-	-	-
Gas - CT	(16)	-	10,556	-	-	14,382	-	-
Nuclear	-	-	-	555,753	-	-	-	-
Hydro (Total System)								
Solar (Total System)								
Total	(8)	629,278	426,433	555,753	143,322	14,399	1,073,920	265,049
Cost of Reagents Consumed (\$)								
Ammonia	-	-	-	-	-	-	\$199,984	\$36,550
Limestone	-	-	-	-	166,968	-	964,307	298,793
Re-emission Chemical	-	-	-	-	-	-	20,217	-
Sorbents	-	-	-	-	-	-	195,032	112,482
Urea	-	-	-	-	104,069	-	-	-
Total	-	-	-	-	271,037	-	1,379,539	447,824

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.

Fuel cost information on this report does not reflect intercompany sharing of fuel-related merger savings between Duke Energy Carolinas and Duke Energy Progress.

Lee and Wayne oil burn is associated with inventory consumption shown on Schedule 6 for Wayne.

Duke Energy Progress
Fuel and Fuel Related Cost Report
July 2017

Schedule 5
Page 2 of 2

Description	Brunswick Nuclear	Blewett CT	Wayne County CT	Darlington CT	Smith Energy Complex CC/CT	Harris Nuclear	Current Month	Total 12 ME July 2017
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	-	-	\$25,091,089	\$344,429,876
Oil	28,784	-	-	-	-	(15,197)	517,159	17,506,654
Gas - CC	-	-	-	-	22,079,992	-	53,721,366	560,016,134
Gas - CT	-	-	408,159	1,418,363	4,574,448	-	7,227,894	113,006,338
Total	28,784	-	\$408,159	\$1,418,363	\$26,654,440	(15,197)	\$86,557,508	\$1,034,959,002
Average Cost of Fuel Purchased (¢/MBTU)								
Coal	-	-	-	-	-	-	311.01	311.58
Oil	1,404.10	-	-	-	-	-	1,228.14	1,243.79
Gas - CC	-	-	-	-	357.33	-	391.77	424.58
Gas - CT	-	-	355.46	371.81	357.66	-	352.32	371.01
Weighted Average	1,404.10	-	355.46	371.81	357.38	-	362.56	377.30
Cost of Fuel Burned (\$)								
Coal	-	-	-	-	-	-	\$49,914,054	\$332,862,119
Oil - CC	-	-	-	-	358	-	358	274,399
Oil - Steam/CT	-	9,290	-	7,392	8,463	-	685,249	18,004,807
Gas - CC	-	-	-	-	22,079,992	-	53,721,366	560,016,134
Gas - CT	-	-	408,159	1,418,363	4,574,448	-	7,227,894	113,006,338
Nuclear	9,361,121	-	-	-	-	4,887,689	18,347,834	193,467,261
Total	\$9,361,121	\$9,290	\$408,159	\$1,425,755	\$26,663,261	\$4,887,689	\$129,896,755	\$1,217,631,059
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	-	-	315.63	311.43
Oil - CC	-	-	-	-	1,627.27	-	1,627.27	1,799.59
Oil - Steam/CT	-	1,667.90	-	1,703.23	1,659.45	-	1,342.42	1,373.78
Gas - CC	-	-	-	-	357.33	-	391.77	424.58
Gas - CT	-	-	355.46	371.81	357.66	-	352.32	371.01
Nuclear	63.05	-	-	-	-	65.45	65.00	64.56
Weighted Average	63.05	1,667.90	355.46	373.32	357.48	65.45	217.01	213.54
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	-	-	3.38	3.33
Oil - CC	-	-	-	-	17.90	-	17.90	52.16
Oil - Steam/CT	-	-	-	-	19.23	-	15.56	18.09
Gas - CC	-	-	-	-	2.81	-	2.94	3.04
Gas - CT	-	-	4.57	5.12	2.73	-	3.15	4.13
Nuclear	0.68	-	-	-	-	0.70	0.70	0.68
Weighted Average	0.68	-	4.57	5.18	2.80	0.70	2.08	2.02
Burned MBTU's								
Coal	-	-	-	-	-	-	15,814,281	106,882,714
Oil - CC	-	-	-	-	22	-	22	15,248
Oil - Steam/CT	-	557	-	434	510	-	51,046	1,310,606
Gas - CC	-	-	-	-	6,179,219	-	13,712,450	131,897,386
Gas - CT	-	-	114,826	381,475	1,278,991	-	2,051,506	30,459,127
Nuclear	14,847,594	-	-	-	-	7,467,782	28,229,005	299,648,624
Total	14,847,594	557	114,826	381,909	7,458,742	7,467,782	59,858,310	570,213,705
Net Generation (mWh)								
Coal	-	-	-	-	-	-	1,478,041	9,990,327
Oil - CC	-	-	-	-	2	-	2	526
Oil - Steam/CT	-	(8)	-	(186)	44	-	4,405	99,548
Gas - CC	-	-	-	-	784,552	-	1,829,427	18,441,320
Gas - CT	-	-	8,936	27,704	167,856	-	229,418	2,735,826
Nuclear	1,383,526	-	-	-	-	698,805	2,638,084	28,373,090
Hydro (Total System)							28,398	415,543
Solar (Total System)							26,925	237,822
Total	1,383,526	(8)	8,936	27,518	952,454	698,805	6,234,700	60,294,003
Cost of Reagents Consumed (\$)								
Ammonia	-	-	-	-	\$25,177	-	\$261,711	\$2,582,589
Limestone	-	-	-	-	-	-	1,430,068	10,115,953
Re-emission Chemical	-	-	-	-	-	-	20,217	199,976
Sorbents	-	-	-	-	-	-	307,514	3,104,161
Urea	-	-	-	-	-	-	104,069	1,011,019
Total	-	-	-	-	25,177	-	2,123,578	17,013,697

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
July 2017

Schedule 6
Page 1 of 3

<u>Description</u>	<u>Weatherspoon</u>	<u>Lee</u>	<u>Sutton</u>	<u>Robinson</u>	<u>Asheville</u>
Coal Data:					
Beginning balance	-	-	-	-	145,247
Tons received during period	-	-	-	-	46,684
Inventory adjustments	-	-	-	-	-
Tons burned during period	-	-	-	-	66,273
Ending balance	-	-	-	-	125,658
MBTUs per ton burned	-	-	-	-	25.40
Cost of ending inventory (\$/ton)	-	-	-	-	77.93
Oil Data:					
Beginning balance	649,158	-	3,137,107	78,040	2,979,289
Gallons received during period	-	-	-	-	-
Miscellaneous use and adjustments	-	-	(243)	-	(3,780)
Gallons burned during period	8,218	-	21,873	-	21,165
Ending balance	640,940	-	3,114,991	78,040	2,954,344
Cost of ending inventory (\$/gal)	2.11	-	2.80	2.56	1.85
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	4,413,682	2,957,714	-	157,373
MCF burned during period	-	4,413,682	2,957,714	-	157,373
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	-	9,993
Tons received during period	-	-	-	-	2,055
Inventory adjustments	-	-	-	-	-
Tons consumed during period	-	-	-	-	3,849
Ending balance	-	-	-	-	8,199
Cost of ending inventory (\$/ton)	-	-	-	-	40.92

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Gas is burned as received; therefore, inventory balances are not maintained.

The oil inventory data for Wayne reflects the common usage of the oil tank used for both Wayne and Lee units.

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
July 2017

Schedule 6
Page 2 of 3

Description	Roxboro	Mayo	Brunswick	Blewett	Wayne County
Coal Data:					
Beginning balance	1,252,571	526,482	-	-	-
Tons received during period	273,529	-	-	-	-
Inventory adjustments	-	-	-	-	-
Tons burned during period	436,216	116,118	-	-	-
Ending balance	1,089,884	410,364	-	-	-
MBTUs per ton burned	25.48	25.99	-	-	-
Cost of ending inventory (\$/ton)	80.91	81.40	-	-	-
Oil Data:					
Beginning balance	430,292	272,464	177,046	786,487	11,981,450
Gallons received during period	200,706	89,577	14,853	-	-
Miscellaneous use and adjustments	(14,853)	(6,538)	-	-	-
Gallons burned during period	222,271	84,663	3,936	3,965	-
Ending balance	393,874	270,840	187,963	782,522	11,981,450
Cost of ending inventory (\$/gal)	1.77	1.77	2.56	2.34	2.41
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	-	-	-	111,029
MCF burned during period	-	-	-	-	111,029
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	98,049	15,601	-	-	-
Tons received during period	16,105	6,405	-	-	-
Inventory adjustments	-	-	-	-	-
Tons consumed during period	24,376	7,216	-	-	-
Ending balance	89,778	14,790	-	-	-
Cost of ending inventory (\$/ton)	37.10	38.46	-	-	-

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
July 2017

Schedule 6
Page 3 of 3

Description	Darlington	Smith Energy Complex	Harris	Current Month	Total 12 ME July 2017
Coal Data:					
Beginning balance	-	-	-	1,924,300	1,441,893
Tons received during period	-	-	-	320,213	4,358,470
Inventory adjustments	-	-	-	-	36,131
Tons burned during period	-	-	-	618,607	4,210,588
Ending balance	-	-	-	1,625,906	1,625,906
MBTUs per ton burned	-	-	-	25.56	25.38
Cost of ending inventory (\$/ton)	-	-	-	80.80	80.80
Oil Data:					
Beginning balance	9,935,490	8,141,337	284,804	38,852,964	38,478,655
Gallons received during period	-	-	-	305,136	10,199,490
Miscellaneous use and adjustments	-	-	-	(25,414)	(245,230)
Gallons burned during period	3,133	3,795	-	373,019	9,673,248
Ending balance	9,932,357	8,137,542	284,804	38,759,667	38,759,667
Cost of ending inventory (\$/gal)	2.36	2.32	2.56	2.35	2.35
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	369,798	7,191,792	-	15,201,388	156,893,954
MCF burned during period	369,798	7,191,792	-	15,201,388	156,893,954
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	123,643	111,023
Tons received during period	-	-	-	24,565	279,421
Inventory adjustments	-	-	-	-	(10,346)
Tons consumed during period	-	-	-	35,441	267,331
Ending balance	-	-	-	112,767	112,767
Cost of ending inventory (\$/ton)	-	-	-	37.56	37.56

Schedule 7

DUKE ENERGY PROGRESS
ANALYSIS OF COAL PURCHASED
JULY 2017

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ASHEVILLE	SPOT	-	-	-
	CONTRACT	46,684	\$ 3,657,169	78.34
	ADJUSTMENTS	-	80,530	-
	TOTAL	46,684	3,737,699	80.06
MAYO	SPOT	-	-	-
	CONTRACT	-	26,698	-
	ADJUSTMENTS	-	89,914	-
	TOTAL	-	116,612	-
ROXBORO	SPOT	-	(1,430)	-
	CONTRACT	273,529	20,769,868	75.93
	ADJUSTMENTS	-	468,340	-
	TOTAL	273,529	21,236,778	77.64
ALL PLANTS	SPOT	-	(1,430)	-
	CONTRACT	320,213	24,453,735	76.37
	ADJUSTMENTS	-	638,784	-
	TOTAL	320,213	\$ 25,091,089	\$ 78.36

Schedule 8

**DUKE ENERGY PROGRESS
ANALYSIS OF COAL QUALITY RECEIVED
JULY 2017**

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
ASHEVILLE	6.05	8.70	12,804	2.11
MAYO	-	-	-	-
ROXBORO	6.37	9.54	12,562	1.64

Schedule 9

**DUKE ENERGY PROGRESS
ANALYSIS OF OIL PURCHASED
JULY 2017**

	BRUNSWICK	MAYO	ROXBORO
VENDOR	Selma Tank Farm	Greensboro Tank Farm	Charlotte and Greensboro Tank Farms
SPOT/CONTRACT	Contract	Contract	Contract
SULFUR CONTENT %	0	0	0
GALLONS RECEIVED	14,853	89,577	200,706
TOTAL DELIVERED COST	\$ 28,784	\$ 153,135	\$ 350,359
DELIVERED COST/GALLON	\$ 1.94	\$ 1.71	\$ 1.75
BTU/GALLON	138,000	138,000	138,000

Note:

Sampling charges of \$4,242 for the Asheville station and price adjustments of \$(15,197) and \$(4,164) for the Harris and Robinson stations, respectively, are excluded.

Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
August, 2016 - July, 2017
Nuclear Units

<u>Unit Name</u>	<u>Net Generation (mWh)</u>	<u>Capacity Rating (mW)</u>	<u>Capacity Factor (%)</u>	<u>Equivalent Availability (%)</u>
Brunswick 1	8,140,832	938	99.07	97.78
Brunswick 2	7,137,476	932	87.42	90.20
Harris 1	7,504,045	928	92.31	90.25
Robinson 2	5,590,737	741	86.13	84.80

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
August, 2016 through July, 2017
Combined Cycle Units**

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Lee Energy Complex	1A	1,304,406	212	70.44	79.94
Lee Energy Complex	1B	1,284,438	211	69.69	83.82
Lee Energy Complex	1C	1,289,105	212	69.44	81.72
Lee Energy Complex	ST1	2,394,769	379	72.18	81.24
Lee Energy Complex	Block Total	6,272,718	1,013	70.72	81.45
Richmond County CC	7	984,880	182	61.88	68.60
Richmond County CC	8	967,473	181	61.04	67.86
Richmond County CC	ST4	1,125,282	173	74.48	72.65
Richmond County CC	9	1,357,436	205	75.62	82.37
Richmond County CC	10	1,373,383	205	76.51	82.60
Richmond County CC	ST5	1,833,609	248	84.34	88.68
Richmond County CC	Block Total	7,642,063	1,193	73.12	78.53
Sutton Energy Complex	1A	1,395,590	214	74.65	87.08
Sutton Energy Complex	1B	1,423,464	214	76.14	88.17
Sutton Energy Complex	ST1	1,715,083	266	73.54	92.91
Sutton Energy Complex	Block Total	4,534,137	693	74.68	89.26

Notes:

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
August, 2016 through July, 2017**

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Mayo 1	1,874,396	741	28.87	87.13
Roxboro 2	2,009,226	673	34.11	96.21
Roxboro 3	2,210,845	696	36.25	89.95
Roxboro 4	1,590,580	708	25.66	73.37

Notes:

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
August, 2016 through July, 2017
Other Cycling Steam Units**

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Asheville 1	663,321	191	39.59	79.02
Asheville 2	651,165	191	38.87	81.75
Roxboro 1	1,052,223	380	31.63	96.12

Notes:

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
August, 2016 through July, 2017
Combustion Turbine Stations**

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Asheville CT	171,882	359	88.14
Blewett CT	-212	64	98.57
Darlington CT	102,624	867	88.24
Richmond County CT	1,971,852	882	92.95
Sutton CT	-438	72	96.85
Sutton Fast Start CT	14,738	90	93.56
Wayne County CT	506,591	935	96.42
Weatherspoon CT	-162	155	86.20

Notes:

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data**

Schedule 10
Page 6 of 6

**Twelve Month Summary
August, 2016 through July, 2017
Hydroelectric Stations**

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Blewett	82,164	27.0	78.01
Marshall	4,132	4.0	31.18
Tillery	120,760	84.0	93.71
Walters	208,487	113.0	98.99

Notes:

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.